

Reply to Office Action dated June 4, 2009

REMARKS

Claims 1-3 and 7-9 are pending in this application. By this Amendment, claim 1 is amended, claims 4-6 are canceled without prejudice or disclaimer and new claims 7-9 are added. Various amendments are made for clarity and are unrelated to issues of patentability.

The Office Action rejects claims 1-3 and 6 under 35 U.S.C. §102(b) by U.S. Patent 3,224,955 to Andeson. The Office Action also rejects claims 1-3 and 6 under 35 U.S.C. §103(a) over KR 10-2003-0077095 (Abstract) (hereafter the Korean reference). The rejections are respectfully traversed with respect to the pending claims.

Independent claim 1 recites a lubricating oil applied on frictional surfaces to reduce friction thereon, and less than 1.0 wt% of carbon nano particulate. Independent claim 1 also recites that the carbon nano particulate is infused into the lubricating oil using an agitator or an ultrasonic dispersion device, and wherein when the ultrasonic dispersion device discharges ultrasound into the liquid, a shock wave of cavitation bubbles created in the liquid makes the nano particulate disperse into the lubricating oil.

The applied references do not teach or suggest all the features of independent claim 1. More specifically, Anderson and the Korean reference do not teach or suggest that the carbon nano particulate is infused into the lubricating oil using an agitator or an ultrasonic dispersion device, and wherein when the ultrasonic dispersion device discharges ultrasound into the liquid, a shock wave of cavitation bubbles created in the liquid makes the nano particulate disperse into the lubricating oil. Anderson's flowchart and col. 2 do not suggest these features. Additionally, the Abstract of the Korean reference does not teach or suggest these features.

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For at least these reasons, the applied references do not teach or suggest all the features of independent claim 1. Independent claim 1 therefore defines patentable subject matter.

Independent claim 7 recites a lubricating oil to reduce friction on frictional surface, and carbon nano particulate of less than 1.0 wt% infused into the lubricating oil using an agitator or an ultrasonic dispersion device, and wherein a shock wave of cavitation bubbles created in a liquid dispenses the nano particulate into the lubricating oil.

For at least similar reasons as set forth above, Anderson and the Korean reference do not teach or suggest carbon nano particulate of less than 1.0 wt% infused into the lubricating oil using an agitator or an ultrasonic dispersion device, and wherein a shock wave of cavitation bubbles created in a liquid dispenses the nano particulate into the lubricating oil. Thus, independent claim 7 defines patentable subject matter.

For at least the reasons set forth above, each of independent claims 1 and 7 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-3 and 7-9 are earnestly solicited. If the Examiner believes that any additional changes would place the application in

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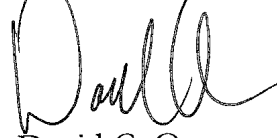
Docket No. **HI-0297**

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better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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